**📅 Day 5.1 – HTML Learning Note**

**Topic:** Semantic Tags, Special Characters, Escaped HTML, <pre> and <code>

**✅ 1. HTML Structure Recap**

I practiced writing a well-structured HTML document using:

* <!DOCTYPE html>: Declares the document type and version (HTML5).
* <html lang="en">: Defines the language of the document.
* <head>: Contains metadata like charset, title, viewport, etc.
* <body>: The visible content area of the page.

**✅ 2. Semantic Tags**

Semantic tags clearly define the purpose of the HTML elements, improving SEO and accessibility.

**🧱 <header>:**

* Represents the **top section** of the web page.
* Often includes **logos, page titles, navigation**, etc.
* In this example, it contains text and a navigation menu.

**📚 <nav>:**

* Used **inside the header** to define a navigation block.
* Contains an unordered list (<ul>) with <li> items:
  + home
  + head
  + body

**📌 <main>:**

* Represents the **central/main content** of the web page.
* Only **one <main> tag** should exist per page.
* Here, it contains a heading: <h1>this is h1</h1>

**📩 <footer>:**

* Placed at the **bottom of the page**.
* Often includes copyright, contact info, etc.
* Example used:
* copyright tingtong | all right reserved.

**✅ 3. Special Characters (HTML Entities)**

Special characters are used to display reserved symbols in HTML.

**Examples:**

* 3>4 – Displays as text, but not valid HTML syntax.
* &lt;p&gt;&lt;/p&gt; – Escaped tags, **displays literally**: <p></p>
* &copy; – Displays the **© (copyright)** symbol.
* &nbsp; – Represents a **non-breaking space** (used here for spacing).

**✅ 4. <pre> and <code> Tags**

These tags are used to display **preformatted code** or **content with spacing/line breaks** preserved.

**🔹 <pre>:**

* Preserves whitespace, indentation, and line breaks.
* Useful for showing **exact formatting**.

**🔹 <code>:**

* Displays content in **monospaced font**, typically used for **code snippets**.

**Example from the code:**

<pre>

<p>this is new para</p>

and this new line space included.

</pre>

* It renders the paragraph inside <pre> literally.
* Spaces and line breaks are preserved as typed.

**🔹 Nested <pre><code> block:**

Used to **display HTML code as readable text**:

<pre>

<code>

&lt;/body&gt;

&lt;/html&gt;

&lt;!DOCTYPE html&gt;

...

</code>

</pre>

**💡 Key Learnings**

* Semantic tags improve **structure and readability**.
* HTML entities allow you to **display reserved characters** safely.
* <pre> and <code> are great for **code formatting** and **preserving layout**.
* Using proper nesting (e.g., <nav> inside <header>) helps maintain a **logical document flow**.

**✍️ Practice Tip**

Try embedding more semantic tags like:

* <section>, <article>, <aside>  
  Explore how browser styles differ between <div> and semantic tags!